State Pollution Laboratory Gig Harbor, Washington. October 7, 1942.

REPORT ON WESTERN GAS PLANT----BREMERTON, WASHINGTON.

On September 11, 1942 a trip was made to the Western Gas Company located at Bremerton, Washington. This company had previsouly been convicted by the Justice of the Peace Court in Bremerton for pollution. Mr. Cookingham, the owner, agreed to take care of all wastes from the gas plant in a mannor which would be satisfactory to the Fisheries Department.

The wastes from this plant consists of excess washing and condenser water which contains petrolium asphalt compounds. Probably the most toxic substances found in these petrolium asphalt compounds are phenols and cresols. These substances are absorbed to a certain extent by the washing water and are thus carried to Puget Sound by way of the city sewer.

The original method of disposal was as follows:- All wastes, washing water and condenser water, entered a baffled sump where the oily material rose to the surface and was pumped to storage tanks and hold until sold. Most of the washing and condenser water was pumped back and reused in the scrubbers while the surplus water was pumped to three barrels where the oil furtheredeperated. The effluent was then run to an other box from which the water was allowed to drain into a city sewew manhole. The oil layer was retained in the box and removed from timt to time.

Even though the above precautions were taken it was found that the effluent entering the city sewer had a phenol content of 49.0 p.p.m.

At the present time the method of disposal is as follows:- In place of the three barrels a cooling tower has been installed where the cily material is collected and at regular intravals reclaimed. From this tower the effluent passes through a burlap filter, which must be frequently replaced, and then in to the box where the cil is further seperated before the effluent drains into the city sewer. The phenol content of the effluent as it enters the city sewer on September 11, 1942 was 0.84 p.p.m.

When the plant was first inspected early in the afternoon the burlap filter was not in place. After visting the office of the Western Gas Company and returning with Mr. Cookingham, the burlap filter had been replaced and was in operation.

Even though conditions have greatly improved at the Western Gas Company, it is recomended that an additional sump be installed between the last settling box and the sewer. This sump can be easly constructed of dirt and would serve as a safty device in case of a break through in the plant.

Harlan Cheyne

Richard Frotes

